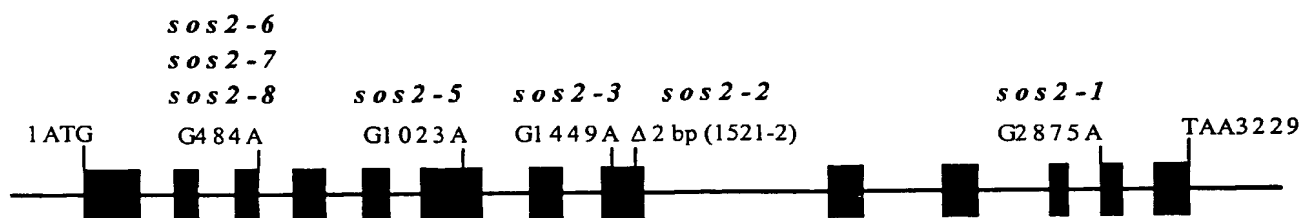
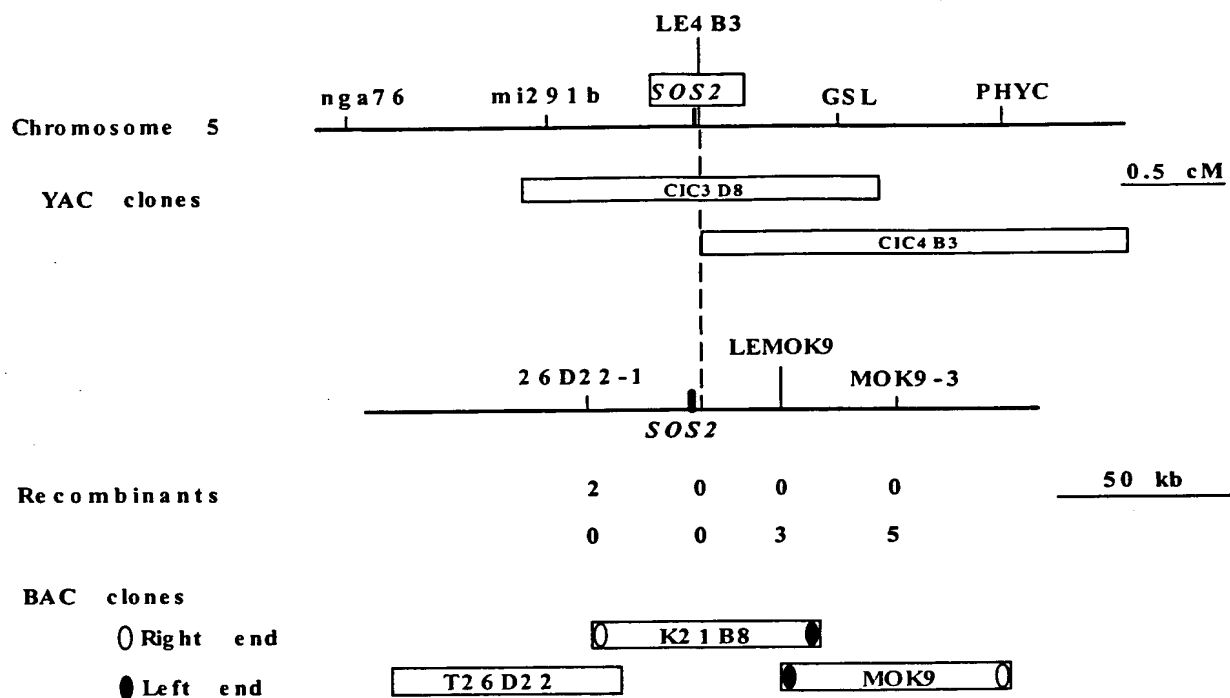




**FIG. 1A**



**FIG. 1B**



**FIG. 2A**



**FIG. 2B**

TCGATCAGATAAAAGTTTCTAAAGA

1 ATGACAAAGAAATGAGAAGAGTGGCCAAAGTACGAGGTTGGTCCCAATACGTGAACGAACCTTTCTAAGGTTAAG  
M T K K M R R V G K Y E V G R T E T F A K K

-- I --

27 TTTCCGACGAACACAGACTCGTGATATGTACCCATCAAAATTATCCCTAAGAGTACAATACCTAAGAACAGATG  
F A R N T D T G D N V I I M A K S T I L K N R M

-- II --

53 GTTGATCAGATAAAAGAGAGATATCTATATGAAGATTGTTGGTCAACCGAACATAGTGAGGTTGTATGAGGTTGTG  
V D Q I K R I S I M K I V R H P N V R L Y E V L

-- III -- -- IV --

79 CCGAGTCCCTTCGAAATATATATAGTTTTCGAGTTTGTGACAGGAGGAGACCTCTTGTATAGAATTGTCATAAACGG  
A S P S K I Y I V L E F V T G G E L F D R I V H K G

-- V --

105 ACCCTTGAAGAAAGTGAGTCTCCGAAATACTTTCACACCTTGTAGATCTGTCTCATTTGCTACTCCAAACGGTGT  
R L E E S E S R K Y F Q Q L V D A V A H E H C K G V

-- VI --

131 TACCACCGTGACCTAAACCCAGAAATCTTTACTCGATACAAATCGAAATCTGAAGGTTTCCGATTTCGACTCAGT  
Y R E K P E E L L D T N G N L K V S L S

-- VII --

157 CCATTCCCTCAGGAACGAGTAGAAGTCTCGGTACCCATGTGGAAGTCCGAACTATGTACCTCCAGAGCTACTTACT  
A L P Q E G V E L L R T T C G E P N V V A P V L S

-- VIII --

183 CGACACGGTTACGATCGTTCAGCACCTGATATTTGGTCTTCCCGGTTATCTTTTCGTTATATTCCCTCGATATTTA  
G Q G Y D G S A A I W S C V I L F V I L A G Y L

-- IX --

209 CCTTTTCCGAGACGATCTTCCACCGTGTACAGAAAAATAAATCCACGAGGTTTCTTGTCCACCGTGGTTTCC  
P F S E T D L P G L Y R K I N A A E F S C P P W F S

-- X --

235 CCAGAACTGAAGTTTAAATACATACGATACTTGACCCCAATCCCAAAACAGTATTCAAATTCAGGAATCAAGAAA  
A E V K F L I H R L D P N P K T R I Q Q G I K K

-- XI --

261 GATCTTCGTTTCAGATTAAATATGTCCCTATACGACCAACCGAAGAAAGAAAGTGAATTTGGATGATATTGGTCCA  
D P W F R L N Y V P I R A R E E E E V N L D D I R A

287 GTTTTGTATGAAATGACCCAGTTATGTACCCGAGAAATGTAGAGAGAAATGATGAACCCCTGATGATGAATCCC  
V F D G I E G S Y V A E N V E R N D E G P L M M N A

313 TTTGAGATGATTACCTTATCACAAAGCTTAAATTTATCTCCACTATTTGACACCGACAGGATTTTGTAAAGCCAA  
F E M I T L S Q G L N L S A L F D R R Q D F V K R Q

339 ACCCGTTTGTCTTCCGAGGAACTAGTGAGATATTTCTAACATTGAGGCTGTACCGAACTCAATCCGTTTAAAG  
T R F V S R R E P S E I I A N I E A V A N S M G F K

365 TCTCATACAGAACTTCAAGACAACCTCGACCGATTATCTTCGATCAACCCCGACAGTTACCTGTTGTATAGAG  
S H T R N F K T R L E G L S S I K A G Q L A V V I E

391 ATTTACGAGGTGCCACCATCCCTTTTCATCGTAGACGTAAAGAACCTCTCGTGAAACTCTTGAATATCACAGGTC  
I Y E V A P S L F M V D V R K A A G E T L E Y H K F

417 TACAAGAACTATGTTCCGAACTCGAAAAATATATCGACCCCAACAGAAAGATACCAAGTCAGAGATTCTCAGA  
Y K K L C S K L E N I I W R A T E G I P K S E I L R

437 ACAATCACGTTTGTATCCCAACTTAA  
T I T F



**FIG. 3A**

SOS2 1 MTKKMRIGYVEGRTTGEGTFKRVNFRNDDTGDNVAKIINASTILKNRNVDO  
AMPK 1 MAEQKQHDGRVIGLYVVEDTLGVTFGKVRNCEQLTGHKVAKIINQKERSLDFVGE  
SNF1 45 SLADGALIGNYQIVVTLGEGFSGKVRLEYHTTGTGQKVAKIINRNVDAKSDMOCE

SOS2 56 IKREISIKKLRHPNIIKLYIVASFSKEYIVVEVGGELFDRIVIKGRHEESERFYF  
AMPK 61 IKREIQNLKLFRRPHIHKLYQVVISPIIDFIVVEYVGGELFDYIVCKUGREHEEMEARRLF  
SNF1 101 IEREISYLRLLRRPHIHKLYIVIKSKDEIIVVEYVAGNELFDYIVQDVESEQEARRLF

SOS2 116 QQIISDAVAHCHCKGVIYHRDLKPENLLLLTNGKRAISDFGLSAIPQIEVLELRTICGHPNY  
AMPK 121 QQIISAVIYCHRHMYVHRDLKPENLLLLDAFANAKIADFGLSNVSDG-EFLRTSCGSPIN  
SNF1 161 QQIISAVEYCHRHKIVHRDLKPENLLLLDEEFANAKIADFGLSNVSDG-NFLRTSCGSPIN

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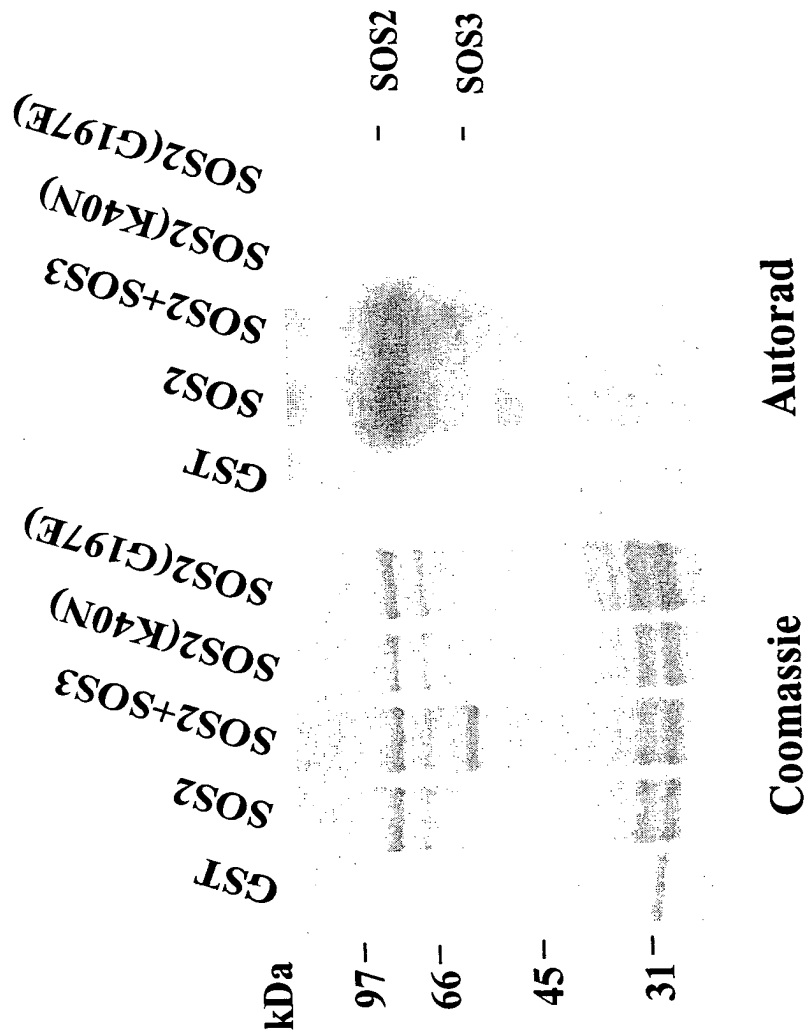
SOS2 176 VAPEVISGQGYDLSAADIWSCGVILVILAGYLPFSETDILGLKIKINAEFCSPNFIA  
AMPK 180 TAPEVISGLYAGPEVDIWSCGVILYALCGTLPEDDEHYETLFFKKIRGEVFIYFELINR  
SNF1 221 AAPEVISGLYAGPEVDIWSCGVILYVLCRRLPEDDESIEVLEFKNISNVEVDEKELLP

SOS2 236 EVKFLIRFLDPNFKTRIQIQGKPKPNEIKIN  
AMPK 240 SVATLIMMLQVPLKRAIIVIEHEWFERQ  
SNF1 282 GAAGLIRMLIVNPLNRISIHEDQDIFKRD

**FIG. 3B**

SOS2 332 QDFVKRQTRFVSRRLPSEIIPANIEAVANSLEKSKS---ETRFKTRLEGSSIAAGQAV  
 yCHK1 389 ICPFERTRFYSRASRETIIDHLYGLRLISVMTKVVESQTIIYNNHLEKCKLEQG  
 hCHK1 371 SRLVKPITRFETKLEACKSYQCKKCEKLGQW---KSCMNQITUSTEISNNKLIFFK

SOS2 389 IETIYEIPSLFVIVKKAAGETLEIKFKYKCKSKLENIIWRATEGFI  
 yCHK1 449 IETITNGLNELIETLRNGIPLERKKEFNQVSSIGKPIVLTDISON  
 hCHK1 428 ENLELD-DNKILVDPEPLSKSDGLKFKHFLKLGKGLIDIVSSQKWLFI



**FIG. 4**

